TIMELY FARM TOPICS No. 52a

SUGAR FROM WHEAT

A transcribed discussion by H. T. Herrick, Special Assistant to the Chief of the Bureau of Agricultural and Industrial Chemistry, and John Baker, Chief of the Radio Service, U. S. Department of Agriculture. Recorded January 17, 1946. Time: 4 minutes, 50 seconds, without announcer's parts.

SCRIPT: NONE

This is an AD LIB recording---a story of how Department of Agriculture scientists worked out a way to make sugar from wheat---to help relieve the sugar situation during the war. The method proved so practical that commercial plants are now producing about 35 million pounds of wheat syrup a year. This research work was done at the Department's Northern Regional Laboratory in Peoria, Illinois, under the direction of H. T. Herrick. Mr. Herrick tells the story to John Baker.

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ANNOUNCER'S OPENING AND CLOSING

OPENING

ANNOUNCER (LIVE):

Sugar from anything is news...we've been short of sugar for such a long time now. And when it's a story of sugar from another farm product, well... farmers have two reasons for being interested. That's the story we have now... a story of sugar from wheat. As you might expect, scientists have a hand in this story...scientists of the Department of Agriculture in this case. But let's hear the story first-hand, from the chemist who directed the work. By transcription from Washington, here's H. T. Herrick, agricultural chemist, and John Baker of the Department of Agriculture's Radio Service.

CLOSING

ANNOUNCER (LIVE):

You've heard this story on sugar from wheat...an important new use for an important farm crop...from H. T. Herrick and John Baker of the United States Department of Agriculture in Washington.

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TIMELY FARM TOPICS No. 52b

FARM BUILDING MATERIALS

A transcribed interview between John Baker, Chief, Radio Service, U. S. Department of Agriculture, and Joe Simons, Beltsville Research Center. Recorded January 24, 1946. Time: 7 minutes and 2 seconds without announcer's parts.

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ANNOUNCER'S OPENING AND CLOSING

OPENING

ANNOUNCER (LIVE):

It's getting to be spring clean-up time around the farm. And a good chance to kill two birds with one stone---clean up and keep down fire danger, and spruce up the place by doing some repairing and general fixing up. Building materials are still scarce in many places, but, even so, there're a good many things that may be done. Joe Simons, an engineer at the Department of Agriculture in Washington, is talking over this situation with John Baker, also of the Department. By transcription, let's see what they're saying about farm building materials.

CLOSING

ANNOUNCER (LIVE):

Friends, these suggestions came from J. W. Simons and John Baker of the United States Department of Agriculture in Washington.

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TIMELY FARM TOPICS No. 52b

FARM BUILDING MATERIALS

A transcribed interview between John Baker, Chief, Radio Service, U. S. Department of Agriculture, and Joe Simons, Beltsville Research Center. Recorded January 24, 1946. Time: 7 minutes and 2 seconds, without announcer's parts.

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TRANSCRIPTION

BAKER: Right now, Joe, farmers are doing a lot of thinking about building or fixing up about the farm...so I'm wondering if you don't have some ideas that might be helpful.

SIMONS: Perhaps I have. Building supplies of many kinds are still scarce, of course...but there's nothing to keep a farmer from using materials he has right on the farm.

BAKER: Meaning just what?

SIMONS: Well, home-grown lumber...or stone from your own place.

BAKER: Sure...that's what I'll do. I can get that new room on the house built this spring.

SIMONS: Not so fast, John...Even use of home materials takes planning. You likely don't even have your logs out yet.

BAKER: Maybe I was just a little quick on the up-take there. Anyway, it sounds like a good idea. How soon do you suppose I could get started?

SIMONS: By fall, maybe. You could get your logs cut now.

BAKER: I could have 'em sawed this spring, and let my lumber dry through the summer.

SIMONS: Sure...But before you even cut your logs, you ought to have your building plan in mind. I'd advise that you see your county agent or extension forester first...he can help you figure the number of logs you'll need, and the kind and sizes of lumber.

BAKER: There's some other repair work and remodeling I want to do, too. At least I can fix up the old foundation this spring.

SIMONS: That's a good idea...and level up the floors. Then when you can get windows, doors and cabinets, you'll be ready for them.

BAKER: The way it is, Joe, I'm getting more livestock and growing more corn... so I also need a new crib.

SIMONS: Your county agent probably has a catalog of plans you can get from the State College...and since you sometimes have a lot of soft corn, you'll want the Department of Agriculture recommendations on crib ventilation. Since you have home-grown lumber you'll use it for the crib, of course.

BAKER: And that means I'll also have to wait till late summer to build my corn crib. Anyway, I'll get the footings done...I plan to use stone from that rock ledge in the pasture for those.

SIMONS: Then I'm afraid you won't get started soon on that either. You see, that stone is still up there on the side hill...and it's going to take some sweating to get it down where you're going to build. You could get that done this spring.

BAKER: It sounds like a lot of work...Maybe I'll change my mind and use concrete.

SIMONS: You'll still need sand, crushed stone, or gravel...but maybe you can get those locally, especially if you do your own hauling.

BAKER: What about re-inforcing. I was thinking about a concrete feeding platform too, just to keep the cattle out of the mud. Wouldn't I need some rods or other steel, or reinforcing?

SIMONS: Not necessarily. If it's on solid ground, most farm concrete work won't need reinforcing.

BAKER: Then I'll get that feeding platform in this spring. I can get enough stone in a day or two and there's plenty of sand and gravel down at the creek.

SIMONS: Yes, but get those logs out first. Then after the crops are laid by you can get out more stone...so next fall you can have that crib built before time to pick corn.

BAKER: Say, Joe---going back to that new room on the house that we were talking about. Suppose a fellow doesn't have his own lumber or stone---and can't get any right now.

SIMONS: Well, had you thought about using concrete block or cinder block? They're fairly plentiful---and in most parts of the country they'll be about as cheap as lumber, if you have to buy the lumber.

BAKER: Well, I hadn't thought about concrete or cinder block, but it's an idea. They make a pretty well insulated wall, don't they?

SIMONS: Cinder block gives better insulation than block made of sand or gravel. They both make a tight wall, but concrete or cinder block won't make as warm a house as good frame construction, unless you add insulation. If you do insulate, then the concrete or cinder block room or house can be kept very warm.

BAKER: There's something else about concrete and cinder block that I don't like. Maybe a matter of taste---but I don't think it looks very good.

SIMONS: Of course, every man to his own taste, but if the house is well proportioned, you don't notice the material of which it's made; and a good job of painting will make it look very attractive. Or it can be stuccoed. I can show you a lot of houses...on farms and in town...made of cinder block, or concrete block, that I believe you would say are good looking houses.

BAKER: All right, Joe, I withdraw my objection. Now...how about brick and tile?

SIMONS: They're both fine, if you can get them. But they're rather hard to get in most parts of the country these days.

BAKER: Then for most farm improvements or addition...it looks as though lumber... or concrete block or cinder block may be the best material to use... because you can get those things. One thing...about building on a new room...I know from experience...it's important to keep the water out of the basement. Is there any way of waterproofing the walls?

SIMONS: Why, yes. That's not too hard to do. Make a mortar...of one part of cement and three parts of sand...and put on a half inch coating.

BAKER: Now let me get that...one part of cement...three parts of sand...and smear on a half-inch coating.

SIMONS: That's right...so far. Then put a coating of asphalt on the outside of that.

BAKER: Then...you have a half inch coating of mortar outside the basement wall...and a layer of asphalt outside that. Sounds as though that should make the basement wall waterproof all right. But what about waterproofing the wall above the ground...a concrete block, or cinder block wall?

SIMONS: All right---here's the way to waterproof a concrete or cinder block wall above the ground. First---make a paint of cement, lime and water; just dump cement into water until it gets about as thick as paint. For the first coat---put in a little fine sand. A little lime will make it work easier. Then wet the wall---and brush on the cement paint that you've made. Use a stiff brush, so it will work the cement paint into the pores and crevices of the block. After the first coat has dried for about 24 hours, put on another coat---made without using any sand. That double coating of cement paint should make the wall fairly waterproof.

BAKER: Now---here's another sort of problem lots of folks seem to be wondering about: how to go about repairing a concrete floor or wall that has developed cracks.

SIMONS: That sounds like two different kinds of problems---walls need one kind of treatment; floors may need another. If it's a concrete wall that has developed cracks---chisel out the cracks until they're about half an inch deep; then mix a sand and cement mortar and fill the cracks and smooth them over.

BAKER: That doesn't sound too difficult. Now---about a concrete <u>floor</u> that has sorta gone to pot.

SIMONS: About the best thing to do there is take a pick and roughen the surface all over---so the new layer of concrete that you're going to put on top will stick. Mix a batch of mortar---enough to make a layer an inch and a half thick all over the floor---then clean the concrete---wet it--- and powder it with dry cement---and then put down the coating of mortar---

BAKER: An inch and a half of it---

SIMONS: That's right. An inch and a half is thick enough to stand up under the ordinary wear that it's likely to get.

BAKER: We're much obliged to you, Joe Simons, for those suggestions from the Department of Agriculture's engineers---on making repairs and improvements to farm buildings.

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